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NEWS RELEASE

EPA Completes Performance Verification on Indoor Air Filters that Protect Against Biological Threat Agents

CINCINNATI – The U.S. EPA's National Homeland Security Research Center recently completed performance verifications of ten indoor air filters designed to protect building occupants from biological attack from terrorists. EPA's independent measurement of manufacturers' performance claims promotes public confidence and is useful in design, operation, and the decision-making process for the selection of ventilation systems for large buildings.

These filters are designed to be installed in the ventilation air ducting within the mechanical system of a large building. In the event of a biological threat from outdoors, the filters would remove bacterial or viral warfare agents from the air drawn into the building from outside. If the source of the threat originates from within the building, the filters would remove the biological agents from the air circulating within the building to stop the distribution of the agent to other parts of the building. These technologies represent a variety of filter media manufactured by several different vendors and represent a range of performance efficiencies as claimed by the vendors.

The performance of the filters was tested according to a standardized protocol, reviewed by the industry and by other stakeholders. This protocol addressed the efficiency with which the filter removed the very fine particles, down to a size of 0.03 microns, characteristic of bacteria and viruses. By comparison, the smallest object that can be seen by the unaided human eye is about 350 microns. The protocol also addressed the efficacy of each filter in removing selected biological agents, irrespective of particle size, including selected bacteria and viruses.

The performance verification was conducted by the EPA's Environmental Technology Verification Program (ETV). The verification results of the ten filters will be posted for review on the ETV web site at http://www.epa.gov/etv/verifications/vcenter10-1.html

ETV is a public-private partnership that provides quality-assured, peer-reviewed test data about the performance of new environmental technologies so that purchasers and regulators are aided in their decisions about innovative environmental technology. More than

260 technologies have been verified across a wide spectrum of environmental science and engineering categories.

EPA relies on quality science as the basis for sound policy and decision-making. EPA's laboratories and research centers, and EPA's research grantees, are building the scientific foundation needed to support the Agency's mission to safeguard human health and the environment.